# Meter Data Comparison – Bundled Customer (meter exchange required) to Direct Access (IDEAL DATA ELEMENTS)

#### **STEP #1** Data from the Enrollment DASR

Data Element	S	Type	TEP	SRP	APS			
	i							
	Z							
	е							
Data Elements begin with Step #2								
						-		

STEP #2 Metering Information from UDC to MSP/ESP

Data Element	IG Loc.	UIG	TEP (Curr ent)	SRP (Curr ent)	APS (Curr ent)	AZ Ideal Data Elements Required = R Conditional = C Optional = O	CUBR
Customer name	H050 N102	0	Х	X	X	R	R-H050 N102
Service address	H070 N3	0	Х	Х	Х	R	R-H070 N3
Business Name (DBA)					Х	C – used if data available – ( 3-15-00 UDCs recommend keeping this field)	
Mailing Address						Delete	
Customer Phone				Х		Delete	
Building/Unit					Х	Delete	
Service city/town/county	H070 N4	0	Х	Х	Х	R	R-H080 N4
Date sent from UDC	H020 BGN03	R	Х	Х	Х	R	R-H020 BGN03
UDC Account Number						R	
Existing meter number	D030 REF02	0	Х	Х	X	R	R-D030 REF02
Universal Node Identifier (UNI)			Х		Х	R (3-15-00 CUBR uses SDPI as their UNI)	
DASR Tracking Number			Х	Х		C – may not be used for all metering scenarios. (3-15-00 We believe that CUBR is using this field with a different field name)	
ESP name	H050 N102	0	Х		Х	R – while paper forms are used Janie suggested using ticker symbol for name (NEW, APSES, etc) (3-15-00	O-H050 N102
ESP DUNS	H050 N104	0	Х			R – when electronic format is used – EDI 650, CSV	O-H050 N104
ESP email	H090 PER	0	Х			Delete	
MSP name	H050 N102	0	Х		Х	R – while paper forms are used (3-15-00 This is conditional for CUBR since they send meter data out as	C-H050 N104

04/05/00

<sup>1:02</sup> PM

						requested on their 814 which could have no tie to an MSP. For this AZ scenario we MUST know who the MSP	
						is thus a required field.)	
MSP DUNS	H050 N104	0				R – when electronic format is used – EDI 650, CSV (3-15-00 Same as MSP Name)	C-H050 N104
Scheduling options					Х	Delete	
*Install Meter (new service)					Х	Delete	
*Exchange Meter					Х	C (3-15-00 Changed this field from R to C – We don't know if CUBR uses this type of field.)	
*Upgrade Meter						C (3-15-00 Changed this field from R to C - We don't know if CUBR uses this type of field.	
Read cycle number	D030 REF02	0	Х		Х	R (3-15-00 Conditional(CUBR) – if meter read is based on a cycle)	C-D030 REF02
ESP requested change date			Х		Х	Delete	
Site meet required by UDC (y/n)	D070 YNQ09	0	Х	Х	Х	R (reasons for site meet may vary within service territories) (3-15-00 CUBR has this in step 3 but not the MI)	
Current owner of Meter	D030 REF02	0			Х	Delete (3-15-00 CUBR has it as a required field for other scenarios i.e. ESP to ESP switch.	R-D030 REF02
Current owner of ITs			Х		Х	Delete	
Totalized/Combined Metering (y/n)			Х		Х	R (3-15-00 CUBR doesn't have this field but they DO handle totalized/combined in the HL segment)	
Associated equipment purchase authorization/information (y/n)			Х		Х	R (3-15-00 CUBR does not have this field Changed Associated purchase order to Associated purchase authorization/information)	
Medical Monitoring (y/n)	D030 REF02	0			Х	R	R-D030 REF02

Voltage, electrical, special monitoring Equipment			Х		Х	Delete – this information will appear in Remarks area of document	
Order type					Х	Delete	
Data Element	IG Loc.	UIG	TEP	SRP	APS	Ideal Data Elements Required = R Conditional = C Optional = O	
*Install Meter (install of new meter)					Х	Delete – it appears above	
*Exchange Meter (exchange of existing meter)					Х	Delete – it appears above	
Existing meter owner	D030 REF02	0			х	Delete (3-15-00 CUBR has it as a required field for other scenarios i.e. ESP to ESP switch. **When we get to the other scenarios we will not want both Current and Existing meter owner as CUBR has.)	R-D030 REF02
Existing meter Universal Meter Identifier (UMI)			Х			Delete	C-D030 REF02
Existing meter serial number	D030 REF02	0			Х	Conditional – SRP may not have serial numbers assigned to all meters	O-D030 REF02
Existing meter model/type	D030 REF02	0	Х	Х	Х	R	O-D030 REF02
Existing meter register model/type	D030 REF02	0			Х	Delete	O-D030 REF02
Existing meter form number	D030 REF02	0	Х	Х	Х	R	O-D030 REF02
IDR meter (y/n)						R	
IDR number of channels	D030 REF02	0	Х	Х	Х	Delete – based on meter type (3-15-00 CUBR doesn't have this field but they DO handle device info in the YNQ segment)	
Test amps	D100 MEA03	0	Х	Х	Х	Pending Delete Conditional(CUBR) Required if available	C-D100 MEA03
Service voltage						R – Conditional(CUBR) – Required if available	C-D100 MEA03

04/05/00 1:02 PM

PSWG Metering Information & Meter Reading Group

Meter voltage	D100 MEA03	0	Х	Х	Х	R	R-D100 MEA03
Existing meter disk constant (Kh)			Ī			R	
Existing meter pulse constant (Ke)	D100 MEA03	0	Х	Х	Х	Conditional Conditional(CUBR) – Required if available	C-D100 MEA03
Existing meter register constant (Kr)	D100 MEA03	0	Х	Х	Х	Conditional	R-D100 MEA03
Existing dial constant (meter multiplier)						R	
Pulse Output			X		Х	Delete (3-15-00 CUBR uses Disc Constant Ke rather than Pulse Output and defines the ratio in the KYZ Output field)	
CT ratio	D030 REF02	0	Х	Х	X	Conditional – required if CTs are present	O-D030 REF02
CT type					Х	Conditional	
CT id number (s)					Х	Conditional	
CT serial number (s)					Х	Conditional	
PT (VT) ratio	D030 REF02	0	Х	Х	Х	Conditional – required if PT (VT) present	O-D030 REF02
PT (VT)type					Х	Conditional	
PT (VT) id number (s)					X	Conditional	
PT (VT) serial number (s)					X	Conditional	
Remarks	D250 MTX02	0			X	Conditional – this field will be used to specify voltage monitoring, special or electrical monitoring equipment (3-15-00 CUBR does not have a remarks field) On customer accounts located in rural areas, some site information may be included in this field.	
Program ID			X	Х		Delete (3-15-00 CUBR may be using this for other scenarios. No appropriate use of this field identified for AZ)	O-D030 REF02

04/05/00 1:02 PM

Communications (modem)  Module No.	D030?? REF02	0		Х	Delete	
KYZ Output	D030 REF02	0	Х	Х	Conditional – if pulse exists, it will be supplied (3-15-00 Possible discrepancy with CUBRs use of Optional since Disc Constant it Conditional)	O-D030 REF02
Current Tariff Rate	D030 REF02	0	Х	X	Required The current rate the customer is on will be sent.	R-D030 REF02
Meter Class	D100 MEA03	0	X	X	R	R-D100 MEA03
Read Dates (3)			Х	Х	Delete	
Register Ratio	D100 MEA03		Х	Х	Conditional – depends on meter type	C-D100 MEA03
Characteristics (Delta/Wye/Network)	D030 REF02	0	Х	х	R (CUBR calls it the Phase connecting/transformer configuration – Figures are D or W)	C-D030 REF02
Phase	D100 MEA03	0	Х	х	Delete We feel this information is represented in the form number field. This is redundant information.	R-D100 MEA03
Wires	D100 MEA03	0	Х	Х	R	R-D100 MEA03
Number of Dials	D100 MEA03	0	Х	Х	Delete (Discussion point – does this need to be given in step #2)	R-D100 MEA03
Special Read Remarks (type of meter)			Х	Х	Delete	
Meter Location (where meter can be found)	D250 MTX02	0	Х	Х	Conditional – if information is present it will be provided	C-D250 MTX02
Read Instructions (special instructions for reading meter)	D250 MTX02	0	X	X	Conditional – if information is present it will be provided	C-D250 MTX02
DA Ready (SRP service territory)				Х	Conditional – if UDC allows for ESP to buy metering	
Purchase Date	D050	0	X		Delete	

04/05/00 1:02 PM

	DTM					
Return of equipment			Х	Х	Delete	
KVARH Metering required (y/n)					R (this indicated whether kvarh is required)	YNQ~~ N~9~KV ARH
Transaction reference number		R			R - This would be valuable for use in the MADEN and in the future for the 824.	R-H020 BGN02
Refers to LIN01 of 814???					Delete – This is DASR tracking number	C- H0120 BGN06
Communications owner					Conditional	R-D030 REF02
Cell phone for communications(y/n)					R	R-D070 YNQ01
Transformer loss adjustment applies(y/n)					R	R-D070 YNQ01
Phone line dedicated(y/n)					R CUBR – Is required but what if there is no phone?	R-D070 YNQ01
Meter Phone Number					Conditional	
Shared Phone Line (y/n)					R	
XFMR Rating factor					C (may be added if xfmrs are sold to ESPs) PENDING DISCUSSION	
XFMR Accuracy Class					C (may be added if xfmrs are sold to ESPs) PENDING DISCUSSION	
XFMR BIL (basic installation level)					C (may be added if xfmrs are sold to ESPs) PENDING DISCUSSION	

STEP #3 Scheduling Information from MSP/ESP to UDC

Data Element	IG Loc.	UIG	TEP	SRP	APS	Ideal Ideal Data Elements Required = R Conditional = C Optional = O	CUBR
MSP Contact Person					Х	R	
MSP Phone Number					Х	R	
Site meet required by MSP (Y/N)	D070 YNQ01	0	Х	Х	Х	R	R-D070 YNQ01
MSP Projected work date (scheduled installation date)	D050 DTM	0	Х		Х	R	R-D050 DTM02
Agreed upon site meet date/time			X	х	х	Conditional – If MSP or UDC request site meet, additional coordination is required. The method to confirm site meet date and time may be the use of MADEN or some other exception notice.  We would like to keep this for a manual process (forms). A spreadsheet may be needed in the future for when the transaction moves to EDI650.	
ESP Name						R	
Pending owner of meter (specific Company or Customer Name)	D030 REF02	0			Х	R	R-D030 REF02
*Name			Χ	Х		Delete	
*Address			Х	Х		Delete	
*DUNS (optional)				х		Delete Required(CUBR) – If customer, use "customer" We may want to use this for an electronic format (EDI 650)	R-D030 REF03
Pending owner of ITs (specific Company or Customer Name)					Х	R (In AZ the CT & PTs are sold)	

<sup>1:02</sup> PM

Purchase existing ITs (y/n)			Х		Х	R	
						(In AZ the CT & PTs are sold)	
Purchase existing totalized/combined equipment (y/n)					Х	R (In AZ the CT & PTs are sold)	
Purchaser of existing CT/PT (VT) *ESP					X	Delete	
*MSP					X	Delete	
					X		
*Customer						Delete	
Pending Owner of totalized/combined equipment					X	Delete	
*ESP					X	Delete	
*MSP					X	Delete	
*Customer		_			Х	Delete	
Remarks	D250 MTX02	0			Х	Optional	
Installer (UDC or MSP)				Х		Conditional – SRP can perform these services Required(CUBR) DUNS or DUNS+4	R-D030 REF03
Communications to be installed (modern type,			Х	Х		Conditional – SRP can provide	O-D030
phone line installation)						MRSP services	REF02
ESP Provided Meter Manufacturer			Х			Delete (This information will be provided	R-D190 NM1
						on the MIRN form)	
Meter Type	D030 REF02	0	Х			Delete (This information will be provided on the MIRN form)	
Form Number	D030 REF02	0	Х			Delete (This information will be provided on the MIRN form)	O-D030 REF02
IDR Type			Х			Delete	
Customer name						R Required(CUBR)	R-H050 N102
Customer account number assigned by ESP						Delete Is required(CUBR) if currently customer of ESP	O-H100 N102
Service Address						R	
City/Town/County						R	
Customer account number assigned by UDC						R	R-H100

04/05/00 1:02 PM

		N102
Service delivery point (UNI number in Arizona)		C-D030 REF03
Schedule Notification Type	R (this is to indicate what type of notification the MSP is scheduling)	
Meter number		R-D030 REF02
Current meter owner (DUNS or DUNS+4)		R-D030 REF03
Site meet REQUESTED (Y/N)		R-D070 YNQ01

**STEP #4** Meter Information from MSP/ESP to UDC (Post Meter Exchange)

Data Element	IG Loc.	UIG	TEP	SRP	APS	Ideal	CUBR
Date issued by MSP						R (This is for form use only)	R-H020 BGN03
Date exchange/upgrade/removal completed	D050 DTM	0	Х	Х	Х	R	R-D050 REF02
Time exchange/upgrade/removal Completed	D050 DTM	0	Х		X	R Conditional(CUBR) Required for interval meters.	C-D050 REF03
Customer Name						R	
Service Address						R	
Business Name						R	
City/Town/County						R	
UDC Assigned account number						R	
UNI Universal Node Identifier						R	
Existing Meter number						R	
ESP Name						R	
MSP Name						R	
New meter owner	D030 REF02	0			Х	Delete (this appears on the MDCR)	R-D030 REF03
New meter number	D030 REF02	0		Х	Х	R	R-D030 REF02
New meter UMI					Х	Delete	C-D030 REF02
New meter serial number	D030 REF02	0			Х	R	O-D030 REF02
New meter model type	D030 REF02	0			Х	R	R-D030 REF02
New meter register model/type	D030 REF02	0			Х	Delete	O-D030 REF02
New meter form number	D030 REF02	0		Х	Х	R	O-D030 REF02
New meter test amps	D100 MEA03	O			Х	Pending Delete Conditional(CUBR) - Required if available	C-D100 MEA

<sup>1:02</sup> PM

Service voltage						R	C-D100
J						Conditional(CUBR) – Required if available	MEA
New meter voltage	D100 MEA03	0		Х	Х	R	R-D100 MEA03
New meter disk constant (Kh)						R	C-D100 MEA03
New meter pulse constant (Ke)	D100 MEA03	0			Х	Conditional Conditional(CUBR) – Required if available	C-D100 MEA
New meter register constant (Kr)				Х	Х	Conditional – required if available	R-D100 MEA03
New dial constant (meter multiplier)						R	
New meter KYZ Output	D030 REF02	0		Х	Х	Conditional – if pulse exists	O-D030 REF02
Most recent calibration test date					Х	R	R-D050 REF02
Test – full load			Х	Х		Delete This can be requested as needed.	
Test – light load			Х	Х		Delete This can be requested as needed.	
Test – Power Factor			Х	Х		Delete This can be requested as needed.	
# of IDR Channels			Х	Х	Х	R	
Existing Meter Date						Conditional – based on meter type	
Existing Meter Time			Ī			Conditional – based on meter type	
Type of Interval Data Recorder						Delete	
Existing hard dial meter read (kWh)			Х	Х	Х	Conditional – depending on meter type	C-D100 MEA
Existing hard dial meter read (kW)	İ		Х	Х	Х	Conditional – depending on meter	C-D100

04/05/00 1:02 PM

						T	
		1	<b> </b>		1	type	MEA
Existing hard dial meter read (kvarh)						Conditional	C-D100 MEA
Existing TOU read (on peak) kWh						Conditional	
Existing TOU read (on peak) kW						Conditional	
Existing TOU read (off peak) kWh						Conditional	
Existing TOU read (off peak)kW						Conditional	
Existing TOU read (shoulder peak) kWh						Conditional	
Existing TOU read (shoulder peak) kW						Conditional	
Existing meter read display 01			Х	Х	Х	Conditional – depending on meter type	
Existing meter read display 02			Х	Х	Х	Conditional – depending on meter type	
Existing meter read display 03			Х	Х	Х	Conditional – depending on meter type	
Existing meter read display 04			Х	X	X	Conditional – depending on meter type	
Existing meter read display 05			Х	Х	Х	Conditional – depending on meter type	
Existing meter read display 06			Х	Х	Х	Conditional – depending on meter type	
Existing meter read display 07			Х	Х	Х	Conditional – depending on meter type	
Existing meter read display 08			Х	Х		Conditional – depending on meter type	
Existing meter read display 09			Х	Х		Conditional – depending on meter type	
Existing meter read display 10			Х	Х		Conditional – depending on meter type	
Existing meter read display 11			Х	Х		Conditional – depending on meter type	
Existing meter read display 12			Х	Х		Conditional – depending on meter type	
New meter read (kWh)	D100 MEA03	0	Х		Х	R	
New meter read (kW)	D100 MEA03	0	Х		Х	Conditional	
New meter read (kvarh)	D100 MEA03	0				Conditional	

04/05/00 1:02 PM

Return of equipment (Ship or deliver)					X	Delete	
New meter display sequence – kWh			Х		Х	R	
New meter display sequence – kW			Х		Х	Conditional	
New meter display sequence - kvarh						Conditional	
New meter number of dials – kWh	D100 MEA03	0			Х	Required	R-D100 MEA
New meter number of dials – kW	D100 MEA03	0			Х	Conditional	R-D100 MEA
New meter number of dials – kvarh	D100 MEA03	0				Conditional	R-D100 MEA
New meter display decimal value – kWh					Х	Delete	
New meter display decimal value – kW					Х	Conditional	
New meter display decimal value – kvarh					Х	Delete	
Condition of returned meter	D250 MTX02	0			Х	Delete – If the meter is damaged, this information can be displayed in the Remarks field.	
Condition of returned CT/PT (VT)					Х	Delete	
Remarks (comments)	D250 MTX02	0	Х	Х	Х	Optional	
Tariff Rate	D030 REF02	0	Х	Х		Delete	R-D030 REF02
Module Number				Χ		Delete	
Billing Multiplier				Х		Delete	
CT ratio (this is for new MSP equipment only)	D030 REF02	0		Х	Х	C - In Arizona, MSPs can set their own CT/PT (VT)	
CT type (this is for new MSP equipment only)					Х	С	
CT id number (s) (this is for new MSP equipment only)					Х	С	
CT serial number (s) (this is for new MSP equipment only)					Х	С	
CT Use (indoor vs. outdoor) (this is for new MSP equipment only)					Х	С	
PT (VT) ratio (this is for new MSP equipment only)				Х	Х	С	
PT (VT)type (this is for new MSP equipment only)					X	C	
PT (VT) id number (s) (this is for new MSP equipment only)					Х	C	
PT (VT) serial number (s) (this is for new MSP equipment only)					Х	С	
PT (VT) Use (indoor vs. outdoor) (this is for new		İ	i		Х	С	i

04/05/00 1:02 PM

MSP equipment only)							
Rated primary volts (this is for new MSP equipment only)					Х	С	
Rated primary amps (this is for new MSP equipment only)					Х	С	
KYZ Output	D030 REF02	0	Х	Х		Delete – duplicated field.	
Program ID	D030 REF02	0	Х	Х		Conditional – if SRP is reading meter	O-D030 REF02
Special Read Remarks	D250 MTX02	0	Х	Х		Delete – This information will be supplied in Read Instructions. Conditional(CUBR) – Required if available	C-D250 MTX02
Meter Location	D250 MTX02	0	Х	Х		Conditional – if access changes were made by MSP	C- D2550 MTX02
Read Instructions	D250 MTX02	0	Х	Х		Conditional – if access changes were made by MSP	C- D2550 MTX02
Utility's previous account number						Delete Conditional(CUBR) – Ifchanged in past 90 days	C-H100 REF02
Service delivery point ID						Delete – this is signified by the UNI number in AZ. Conditional(CUBR) – Required if available	C-D030 REF02
Utility rate subclass						Delete Conditional(CUBR) – Required if available	C-D030 REF02
Communications owner						Delete	R-D030 REF02
Date device manufactured(meter, CT?,PT?)						Delete Conditional (CUBR) – Required if available, but which devices?	C-D050 DTM02
Cell phone for communications(y/n)						R – MSRP needs this information	R-D070 YNQ01
Pulse output required (y/n)						Delete – this is covered in Pulse Output field	R-D070 YNQ01

		DIVAL
Transformer loss adjustment applies(y/n)	R	R-D070
		YNQ01
Load research meter required(y/n)	Delete – In AZ another sample will	R-D070
	be chosen.	YNQ01
Optical port for communications(y/n)	R	R-D070
		YNQ01
Meter uses communications other than phone,	Delete – this will be designated	R-D070
cellular, or radio(y/n)	under special metering equipment.	YNQ01
Phone line dedicated(y/n)	l R	R-D070
	CUBR – Is required but what if there	YNQ01
	is no phone?	
Uses conventional phone line for	Delete	R-D070
communications(y/n)	CUBR – Is required but what if there	YNQ01
oommanioano(y/n/	is no phone line?	
Line Share Switch (y/n)	R	
Eine Ghaic Gwiton (y/n)		
Power maintained during installation(y/n)	Delete	R-D070
<b>3</b>		YNQ01
Meter has a radio communicator that passes data	Delete	R-D070
through radio waves(y/n)		YNQ01
Number of phases	Delete – this is shown in the form	R-D100
Than so of prisons	number	MEA03
PT quantity (number of PT/VTs at the site)	Delete – CT/VT information will be	C-D100
1 1 quantity (number of 1 1/ v 13 at the site)	separated out in specifics.	MEA03
	Conditional(CUBR) – Required if	WILAUS
	available	
CT quantity(number of CTs at the site)	Delete – CT/VT information will be	C-D100
or quantity(number of ors at the site)		MEA03
	separated out in specifics.	WEAUS
	Conditional(CUBR) – Required if	
	available	
Pulse multiplier	Delete – this is represented as ke	C-D100
	Conditional(CUBR) – Required if	MEA03
	available	
New Meter phone number/LSS Port	Conditional	R-D230
		COM02
Communications device frequency	Delete	C-D230
	Conditional(CUBR) – Required if	COM02
	applicable	